

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1450 Alcassedan, Virginia 22313-1450 www.emplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/587,619	04/11/2007	Arne Haarh	04933-P0031A	3575		
24126 7590 6602/2010 ST. ONGE STEWARD JOHNSTON & REENS, LLC 986 BEDFORD STREET			EXAM	EXAMINER		
			PRAGER, JESSE M			
STAMFORD,	CT 06905-5619		ART UNIT	PAPER NUMBER		
			3745	•		
			MAIL DATE	DELIVERY MODE		
			06/02/2010	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/587,619 HAARH ET AL. Office Action Summary

Office Action Summary	Examiner	Art Unit					
	JESSE PRAGER	3745					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address							
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after Six (6) MONTHS from the mailing date of this communication.  - If NO print of reply is specified above, the mountain statetup venture and expire six (6) MONTHS from the mailing date of this communication.  - If NO print of reply is specified above, the mountain statetup venture and expire six (6) MONTHS from the mailing date of this communication.  Any reply received by the Office later han three months after the mailing date of this communication, even if timely filed, may reduce any earned patient term adjustment. See 37 CFR 1.740(b).							
Status							
1) Responsive to communication(s) filed on 11 M	ay 2010.						
2a)⊠ This action is FINAL. 2b)☐ This	- · · · · · · · · · · · · · · · · · · ·						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4) Claim(s) 37-70 is/are pending in the application	1.						
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) <u>37-66 and 70</u> is/are allowed.							
6)⊠ Claim(s) <u>67-69</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
9) ☐ The specification is objected to by the Examine	r.						
10)⊠ The drawing(s) filed on 26 July 2006 is/are: a)		v the Examiner.					
Applicant may not request that any objection to the		-					
Replacement drawing sheet(s) including the correct			FR 1.121(d).				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
Certified copies of the priority documents have been received in Application No.							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite					
3) Information Disclosure Statement(s) (PTO/SB/06)	8) Notice of Informal P	atent Application					

Notice of References Cited (PTO-892)	4) Interview Summary (PTO-413)	
Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date	
3) Information Disclosure Statement(s) (PTO/SB/06)	Notice of Informal Patent Application	_
Paper No(s)/Mail Date	6) Other:	

Art Unit: 3745

## DETAILED ACTION

This is responsive to the amendment filed on 5/11/2010. Claims 37-70 are pending. The objection to the specification and the objection to claim 42 are withdrawn due to the amendment.

## Response to Arguments

 Applicant's arguments, see Page 13-14, filed 5/11/2010, with respect to claim 44 have been fully considered and are persuasive. The 35 USC 103 rejection of claims 44-46 has been withdrawn. In particular, Wobben (US Patent 6,371,730) does not disclose teach reinforcing at least one hole area of an inner surface of at least one of the blade shells, and instead teaches thickening the blade at the base region, and not specifically at the one hole area of an inner surface.

## Claim Rejections - 35 USC § 103

Claims 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wobben
 (WO 03/1044645) in view of Bervang (WO 03/100249) and in further view of Stiesdal et al. (US Patent Application 2003/0116262).

In regards to claim 67, Wobben discloses handling means (10, 32) for a wind turbine blade at least during storage, transport or mounting, said handling means comprising one or more mounting holes for fastening means fastening the handling means to the surface of the wind turbine blade by using at least two holes in the wind turbine blade (Fig. 4, par. 37 in 2005/0258064 US National Stage of WO Pub. 2003/104645). In particular to at least two holes limitation, the handling means of Wobben contains a hole on the pressure side and a hole on the suction side of the blade, which is opposite to the pressure side.

Application/Control Number: 10/587,619

Art Unit: 3745

Wobben does not disclose an at least one surface substantially corresponding in shape to a section of the wind turbine blade that the handling means covers, and the holes in the wind turbine blade on opposite sides of a strengthening structure inside the blade.

Bervang discloses surfaces (28a, 28b) substantially corresponding in shape to a section of the wind turbine blade that the handling means covers (pg. 19, lines 1-4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the handling means of Wobben by providing at least one surface substantially corresponding in shape to a section of the wind turbine blade that the handling means covers, as taught by Bervang, to limit movement of the blade during handling.

Stiesdal et al. disclose a strengthening structure (21) inside the blade (Fig. 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the handling means of Wobben by providing a strengthening structure inside the blade, as taught by Stiesdal et al. (US Patent Application 2003/0116262), such that the strengthening structure is between the holes on pressure side and suction side (on the opposite side) of the blade, to increase the bending strength of the blade.

In regards to claim 68, the modified handling means of Wobben contains the claimed elements as set forth in the rejection of claim 67 above, except the handling means are made in metal comprising a steel plate, in glass fiber reinforced plastic materials alone or in glass fiber reinforced plastic materials reinforced with carbon fiber or aramid.

Bervang discloses the handling means are made in metal comprising a steel plate (Pg. 19, line 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the handling means of Wobben by providing handling means made of metal comprising a steel plate, as taught by Bervang, to provide a strong and tough material to prevent damage to the wind turbine blades.

Additionally, it is common practice for engineers in the art of handling wind turbine blades to use strong materials to handle the wind turbine blades. It would have been obvious to one having ordinary skill in the handling wind turbine blade art to modify the handling means of Wobben by providing the handling means in metal comprising a steel plate, in glass fiber reinforced plastic materials alone or in glass fiber reinforced plastic materials reinforced with carbon fiber or aramid, as an engineering expedient for the purpose of providing a strong and tough material to prevent damage to the wind turbine blades.

In regards to claim 69, the modified handling means of Wobben contains the claimed elements as set forth in the rejection of claims 67 above, except one or more of the surfaces of the handling means comprise a high friction material.

Bervang disclose one or more of the surfaces of the handling means (28) comprise a high friction material (pg 19 lines 13-19, Fig. 3f).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the handling means of Wobben by providing the handling means with a high friction material, to prevent the blade from slipping from the handling means during transportation.

### Allowable Subject Matter

Claims 37-66 and 70 are allowed.

Application/Control Number: 10/587,619

Art Unit: 3745

4. The following is an examiner's statement of reasons for allowance:

The instant invention is deemed to be an unobvious improvement over the invention patented in US Patent 7,374,405 to Wobben. In regards to claims 37 and 47, the improvement comprises mounting handling means including two mounting means in the at least two holes, wherein the mounting means extend through the wind turbine blade on opposite sides of a strengthening structure inside the blade. In regards to claims 44, the improvement comprises reinforcing at least one hole area of an inner surface of at least one of the shells by applying further layers of material. In regards to claim 61, the improvement comprises providing reinforcement layers on an inner surface of the blade, in combination with providing two holes wherein the two holes penetrate a surface of the blade at the hole area and on opposite sides of a strengthening structure inside the blade.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSE PRAGER whose telephone number is (571)270-1412.

The examiner can normally be reached on Monday-Friday, 9:00 am - 5:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571)272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

Information regarding the status of an application may be obtained from the Patent

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JESSE PRAGER/ Examiner, Art Unit 3745 5/27/2010

/Edward K. Look/

Supervisory Patent Examiner, Art Unit 3745

Application/Control Number: 10/587,619

Page 7

Art Unit: 3745